

DIGITAL MODULATION SIGNAL RECEIVER WITH ADAPTIVE CHANNEL
EQUALIZATION EMPLOYING DISCRETE FOURIER TRANSFORMS

Abstract of the Disclosure

Techniques for calculating the system characteristic of the adaptive filtering used for equalization and echo-suppression in a digital communications receiver, such as one used for receiving over-the-air broadcast digital television signal, are described. In these techniques, the system characteristic of the adaptive filtering is calculated from the

5 discrete Fourier transform of successive portions of the input signal supplied to the adaptive filtering and from the discrete Fourier transform of corresponding portions of the transmitted signal, as estimated in the receiver. Receivers for implementing these techniques in various ways are also disclosed.